



Oracle Field Service Cloud Visual Form Editor

Releases 15.2 - 15.8

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1 Document Purpose and Scope

This document is intended as a description and user manual of Visual Form Editor – a new feature of Oracle Field Service Cloud to be used by the personnel engaged in user management, administration and system configuration. It is assumed that the reader is familiar with the Oracle Field Service Cloud (former ETAdirect) functionalities and operating principles.

2 Glossary

The glossary below contains the basic Oracle Field Service Cloud terms used in this document.

Term	Explanation
Context	Oracle Field Service Cloud screen showing all available properties and action links
Field	Property present in the system by default
Manage Application	Product that allows to manage workforce and activities in realtime. Usually serves as an interface for dispatcher
Mobility Application	Product that allows field personnel to interact with the system
User	1) A person using Oracle Field Service Cloud 2) An entity used for authentication and authorization, allowing people or external software to access Oracle Field Service Cloud

3 Overview

Oracle Field Service Cloud is a complex system consisting of multiple modules executing various functionalities. Different functions are performed in many screens in two applications – Manage (the application providing the interface for dispatchers and other back-office personnel engaged in mobile workforce management) and Mobility (the application for field employees actually performing the customer-facing jobs). The system can be configured taking into account each user's functions and duties. The user is offered a customized application with the access levels and functions relevant to their job. On one hand, this enhances the system security, as users can operate only within the permitted area. On the other hand, the user works in a transparent, clear and understandable environment and is not distracted by unnecessary settings.

In Oracle Field Service Cloud, such flexibility is implemented through the context layout editing functionality, which is actually the possibility of customizing various screens used in Oracle Field Service Cloud and setting their access levels for different user types. This functionality has now received a totally new transparent and intuitive interface where the context layouts can be easily created. The user creating Oracle Field Service Cloud screens is now able to design the layout by dragging and dropping various elements on the screen. The new functionality allows creating Mobility Application contexts of the 'form' type.

4 Context Layout Editing Description

Each screen, form and dialog window in Oracle Field Service Cloud is based on a context layout, which is actually a set of items (fields, text labels and action links) used in such screen, form or dialog window and the elements defining their arrangement (tabs and sections). The context layout also includes the visibility conditions of each item, that is, the conditions in which it is visible or hidden, as

well as the user's access to each item – mandatory, ReadWrite or ReadOnly.

The previous versions of ETAdirect offered a reliable and comprehensive functionality of context layout editing which allowed the following actions:


- adding, updating or removing context layout items
- items arrangement in the screen or window
- adding or removing column and line markers
- adding and removing text labels of items together with their custom translations into other languages
- management of user access and visibilities
- adding and removing action links and buttons

The Visual Form Editor supports all of the above functionality in respect of creating or editing Mobility context layouts of the 'form' type, but in an easy-to-use intuitive manner.

5 Guide to Context Layout Editing

5.1 Accessing Visual Form Editor

Access to the Visual Form Editor functionality is controlled by a special permission, 'Visual form editor'.



The screenshot shows the 'Visual form editor' interface. On the left is a navigation tree with the following structure:

- Manage
 - Company settings
 - Display
 - Display Profiles
 - Context layout list
 - Visual form editor** (highlighted)

The main area displays the 'Permissions > Manage > Company settings > Displ...' path. Below this is a table with the following columns: ID, Profile Name ↑, Denied from level, Status, ReadWrite, ReadOnly, and Hidden. The table lists various user profiles and their permissions.

ID	Profile Name ↑	Denied from level	Status	ReadWrite	ReadOnly	Hidden
71	Admin		✓	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
69	CSR	Company settings, Display, Display Profiles, Context layout list	✓	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
66	Dispatcher	Display, Display Profiles, Context layout list	✓	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
72	File upload	Manage, Company settings, Display, Display Profiles, Context layout list	✓	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
70	Manager	Company settings, Display, Display Profiles, Context layout list	✓	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
115	Routing Manager	Display, Display Profiles, Context layout list	✓	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
68	soap	Manage, Company settings, Display, Display Profiles, Context layout list	✓	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
67	Technician	Company settings, Display, Display Profiles, Context layout list	✓	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
73	Users Admin	Company settings	✓	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

At the bottom of the table are 'Reset' and 'Save' buttons.

Figure 1: 'Visual form editor' permission

For the user to be able to edit context layouts through the Visual Form Editor, the permission must be set to ReadWrite. When the permission is set to ReadOnly, the user can see the contexts in the Visual Form Editor but cannot edit them. With the permission set to Hidden, the Visual Form Editor is unavailable for the user, and the corresponding menu item is hidden.

As in the previous versions, the context layouts are managed for the particular display profiles. They can be found under the 'Display' menu where the 'Display profiles' field contains a list of all display

profiles existing in the system.

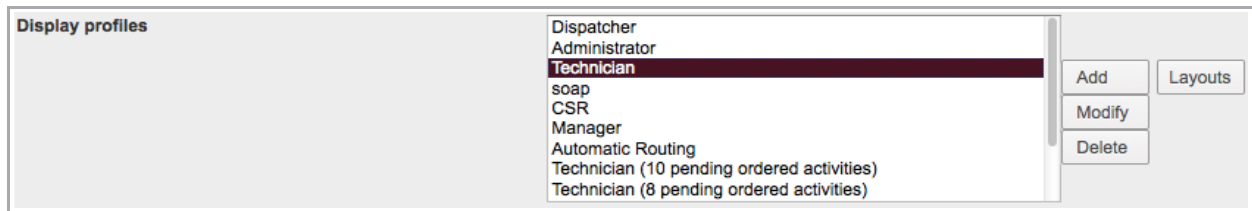


Figure 2: Display profiles

The list of context layouts available for each profile is accessible by either double-clicking the display profile name in the list or by highlighting the profile and clicking 'Layouts'. This opens the 'Context layout list' screen.

Context layout list > Technician

View ▾

Export

<< Return

<< Previous 1 2 Next >>

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Context ↑	Entity	Interface	Context type	Also used in	Action
Activity details in chat	activity	*	identifier	Dispatcher; Administrator; Manager; Technician (10 pending ordered activities); Technician (8 pending ordered activities); Technician (2 pending ordered activities); Technician (Android)	Edit Clear Structure
Activity list	activity	Mobility	grid	Technician (10 pending ordered activities); Technician (8 pending ordered activities); Technician (2 pending ordered activities)	Edit Clear Structure
Activity plugin	activity	Mobility	fieldset		Add new
Add activity	activity	Mobility	form	Dispatcher; Manager; Technician (10 pending ordered activities); Technician (8 pending ordered activities); Technician (2 pending ordered activities); Technician (Android)	Edit Clear Structure Visual Form Editor
Add/Details inventory	inventory	Mobility	form	Dispatcher; Technician (10 pending ordered activities); Technician (8 pending ordered activities); Technician (2 pending ordered activities); Technician (Android)	Edit Clear Structure Visual Form Editor
Add/View inventory request	service request	Mobility	form	Dispatcher; Administrator; Manager; Technician (10 pending ordered activities); Technician (8 pending ordered activities); Technician (2 pending ordered activities); Technician (Android)	Edit Clear Structure Visual Form Editor

Figure 3: Context layout list

The 'Structure' link in the 'Action' column leads to the usual context layout editing screen which was offered in the previous versions of ETAdirect. This link can be used to edit context layouts in the traditional manner.

The 'Action' column for the Mobility context layouts of the 'form' type now has a new 'Visual Form Editor' link leading to the new Visual Form Editor screen.

Note: The underlying context layout editing functionality has remained unchanged.

5.2 Using Visual Form Editor

The Visual Form Editor screen consists of the following components: the source section containing the items available for adding to the selected context and the form builder where the context layout is constructed or edited.

When a new context layout is first opened, it looks like an empty screen with two lines at the top and in the bottom. The upper line is the 'Actions' line where the action buttons are to be placed. The bottom line contains the 'Submit' button used to save changes in the Mobility Application form.

The space between the two lines is used to arrange the fields, custom properties and actions which will appear in the context.



Figure 4: Visual Form Editor screen

5.2.1 Source Section Elements

The source section consists of three subsections which can be expanded or collapsed by clicking the down arrows. Whenever one section is expanded, the other two are collapsed automatically.

The 'Fields' section contains the names and labels of the fields and custom properties available for use in the selected context.

The 'Actions' section contains the names and labels of the actions available for use in the selected context.

The 'Special elements' section contains the names and labels of the elements of the context layout structure:

- Text – text labels which may be used in the context layout. When a text label is added to the form builder, it creates a section of its own. Otherwise, it can be added to another section or tab.
- Section – container element which is used to organize items in the context layout. Sections can contain other sections and/or tabs. In the actual context sections most often appear as blocks grouping the items placed into them. However, when nested within another section, a section has no visible borders, but still joins the items within for group move or deletion.
- Tab – container element which is used to organize items in the context layout. Tabs can contain sections. Tabs can be used to arrange items in columns. In the actual context tabs appear as buttons which, when tapped, open the next screen containing the items placed into the tab. However, in the 'Add activity', 'Add inventory' and 'Add support request' tabs appear as sections with all items inside them immediately visible.

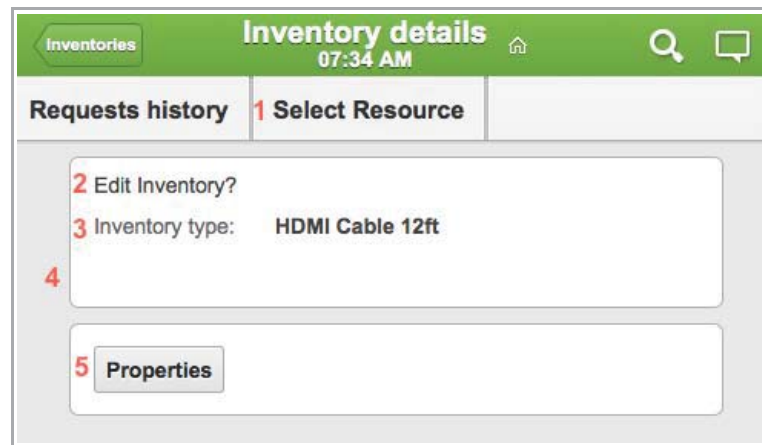


Figure 5: Layout items in actual context

1 – action

2 – text

3 – field

4 – section

5 – tab

5.2.1.1 Item Search

Each section can be searched for a specific item. To start search, the user has to click the 'search' icon ('magnifying glass') in the section header and type the search key. The list is immediately filtered showing the entries containing the search key.

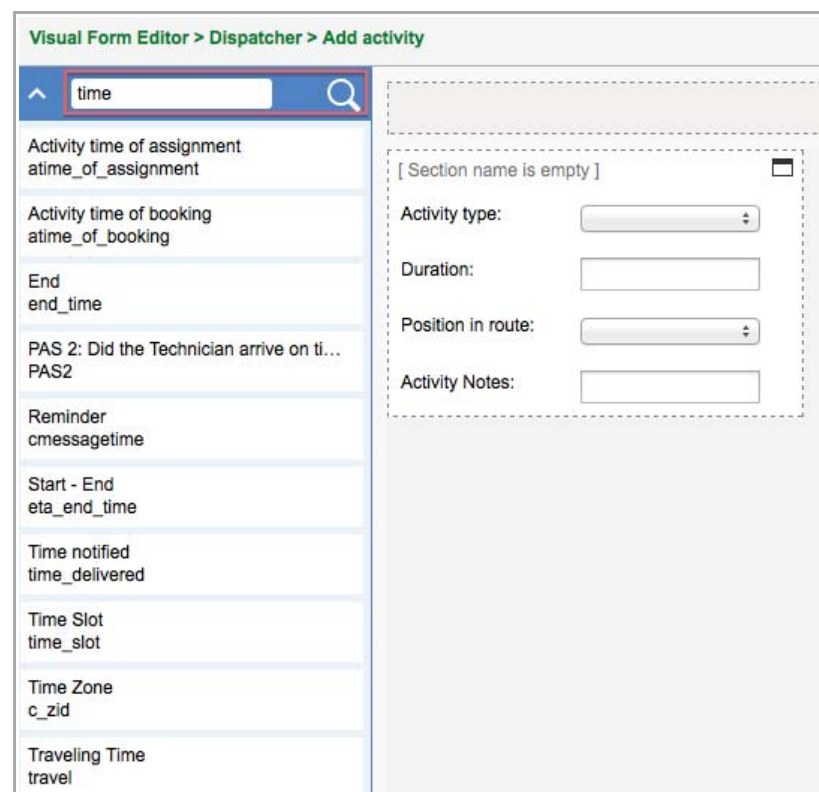


Figure 6: Item search

5.2.2 Adding Items to Context Layout

Items are added to contexts by dragging them from the source section and dropping to the form.

5.2.2.1 Adding Actions

Actions (items from the 'Actions' subsection of the source section) can be added to the 'Actions' line at the top of the screen. In this case they appear as buttons in the top bar in the Mobility Application.

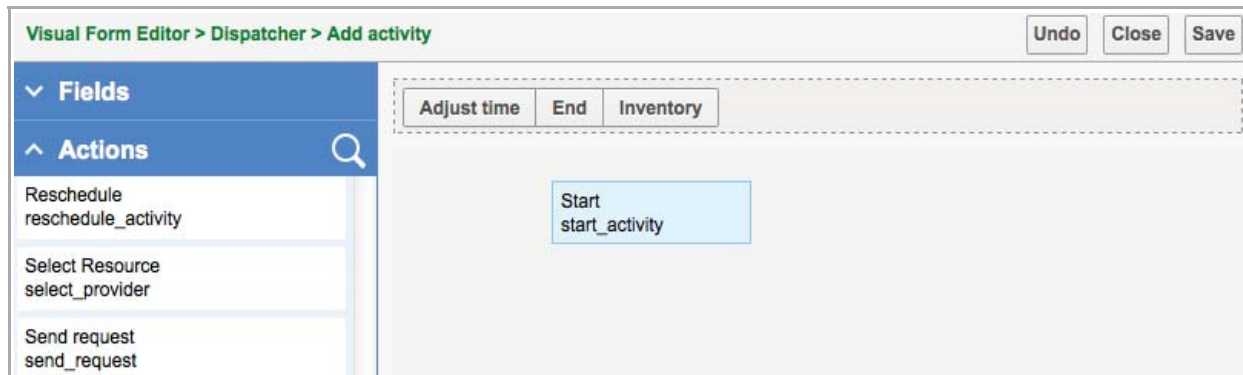


Figure 7: Adding action to 'Actions' line

Actions can also be added to sections or tabs. Also, they can be dropped directly in the form builder. In this case they create a section of their own and appear as buttons within a section or tab in the actual context.

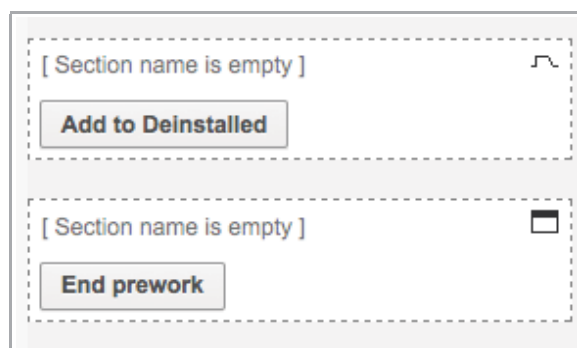


Figure 8: Actions added to section and tab

Each action can be added to the 'Actions' line only once. Also, the same action can be added to a section of the context layout. If the action added to a section is added again to a different section, the action is moved between sections.

Figure 9: Action link in actions line and in section

5.2.2.2 Adding Fields

Fields (items from the 'Fields' subsection of the source section) can only be added in the fields section (the main part of the form builder screen). Fields can only be added into sections or tabs. If a single field is dropped in the form builder, it creates a section of its own. The place where the dragged field is to be added is marked with a blue line.

Figure 10: Field adding

Each new section is created without a name. The section name is marked with the [Section name is empty] message at the top of each section. The user can click this message and type the section name instead.

Figure 11: Section name

Fields are added to context layouts in the same format as they will appear in the actual screen, that is, the name and input field. The input field corresponds to the type defined for the field in the 'Properties' screen (for example, combobox, text field, checkbox, etc.). However, the input fields in the form builder are intended as illustrations only and are, therefore, disabled.

Figure 12: Different field types in context layout

Note: the actual level of the user's access to a field is controlled by permissions and visibilities defined for a particular security profile or display profile. Therefore, subject to the user's permissions and visibilities, a field may appear differently in the screen. For example, a combobox may appear as a ReadOnly text field if the user has no permission to edit it.

Each field can be added to a context layout only once. If the same field is dragged to the form builder and dropped in a different place, the field is moved. If the same field is dropped to the same section or tab, the initial field is deleted and a new one is added in a new place.

Note: a field added to a tab can be added again to a different tab in the same context.

5.2.2.3 Adding Special Elements

Another way to organize a context layout is to add text labels, sections and tabs to an empty layout and then fill them with fields. Such items can be found under 'Special elements' in the source section. They are added by dragging and dropping, similarly to other context layout elements.

All special elements are created with empty names which can be later edited.

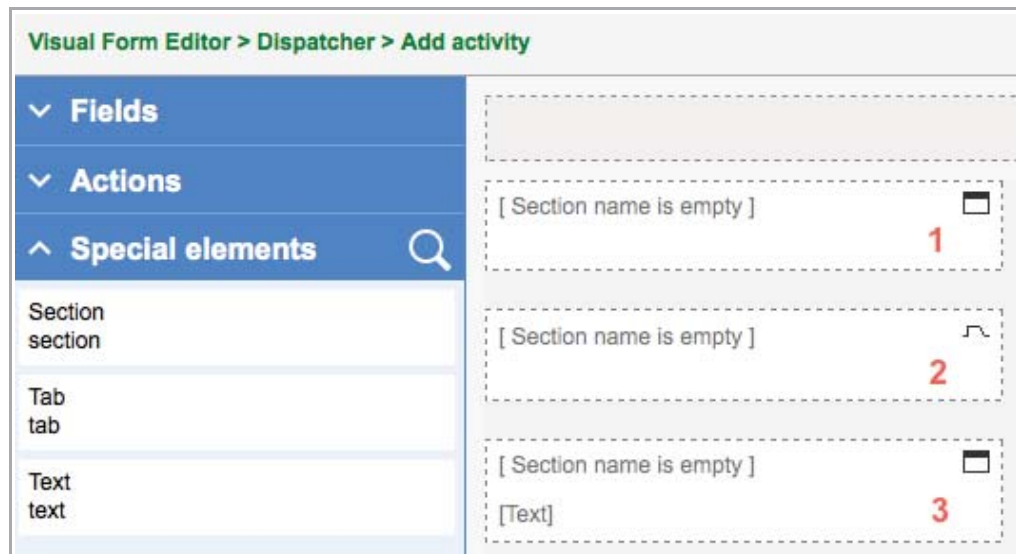


Figure 13: Special elements added to context

- 1 – section
- 2 – tab
- 3 – text

Depending on the specific requirements, special elements can be nested within each other. Tabs, sections and text labels can be added to other sections or tabs.

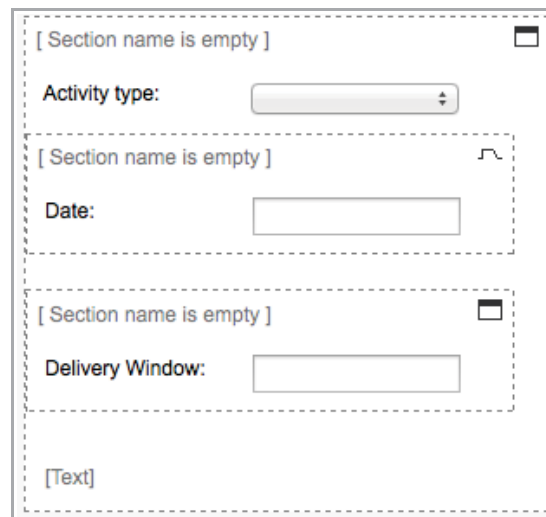


Figure 14: Section with nested elements

Elements of the context layout can be rearranged in the screen by dragging and dropping to a different place. Whole sections or tabs can be moved together with their content, as well as individual fields or labels can be moved between sections and/or tabs or outside their sections or tabs. The new position of an element is marked with a blue line.

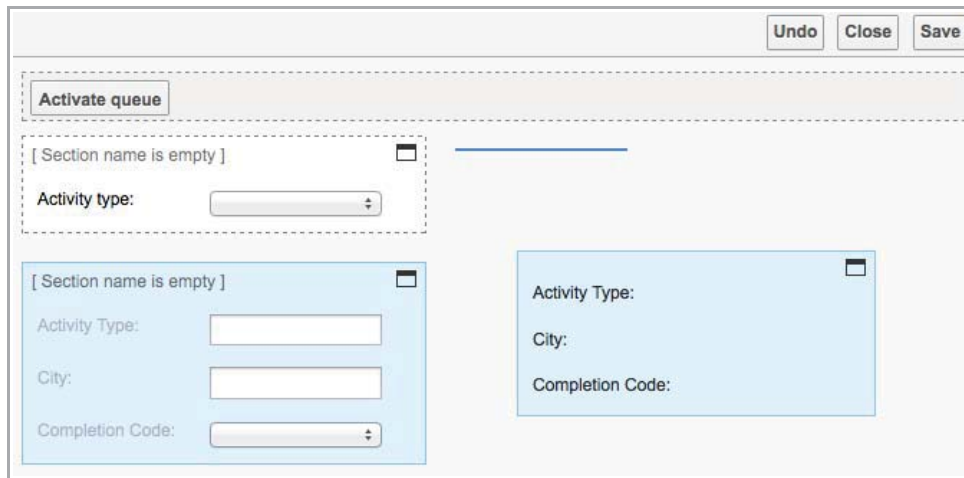


Figure 15: Element moving

The last action performed in the Visual Form Editor can be canceled by clicking 'Undo' in the top right corner of the screen.

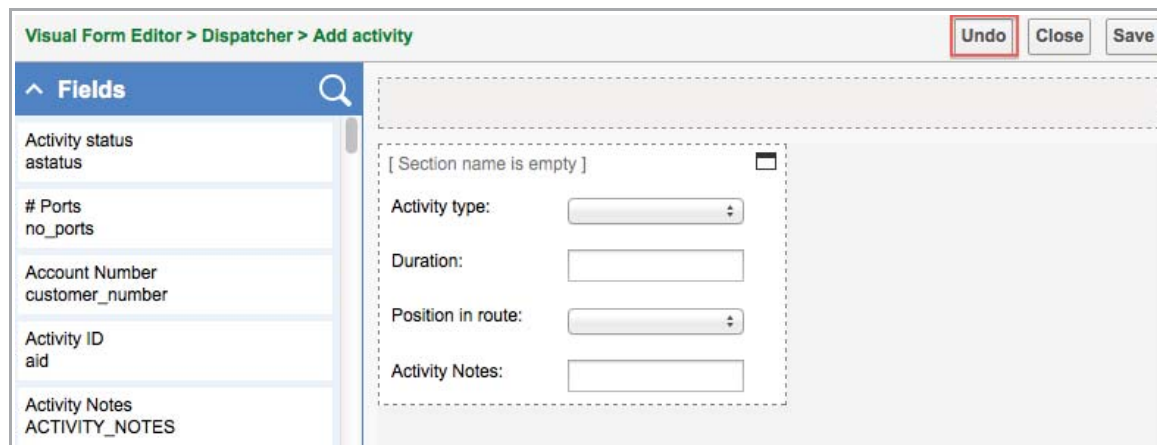


Figure 16: 'Undo' button

When no actions which can be canceled have been performed, the 'Undo' button is disabled.

5.2.3 Settings

Clicking a field, action or special element opens the 'Settings' popup window where the general information of the element and its visibility can be configured.

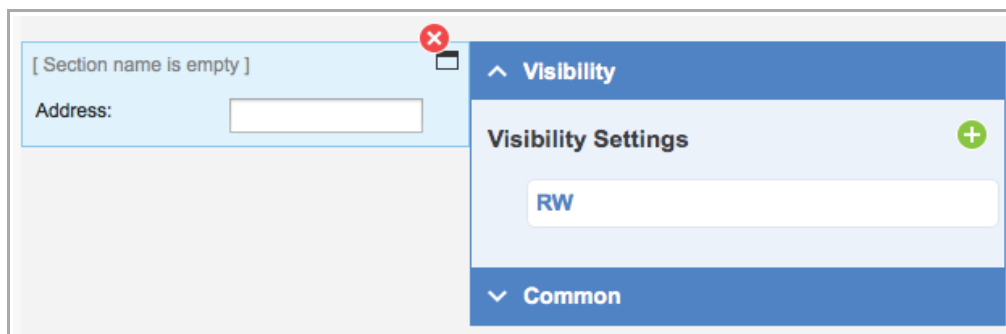


Figure 17: 'Settings' window

5.2.3.1 Common Settings

The 'Common' section of the 'Settings' window contains the common information of the selected item – its label, translations, GUI type and custom names. The label, translations and GUI type correspond to the settings of the related property or action as defined in the 'Properties' or 'Action management' screens.

The screenshot shows a 'Settings' window with a 'City:' label and a text input field. The 'Common' section is expanded, showing the following settings:

Field Label	ccity
Field GUI	text
Original name (English)	City
Custom name	<input type="text"/>
Original name (Spanish)	Ciudad
Custom name	<input type="text"/>
Original name (French)	Ville
Custom name	<input type="text"/>

Figure 18: Common settings

The user can type a custom name for any of the available translations. Such custom name will be used for the selected property for all users to which the display profile is assigned.

The 'Common' settings for a section or a tab allow changing its type from section to tab and vice versa. This is done through a radio group with two options, 'Section' and 'Tab', where the special element type can be selected.

The screenshot shows a 'Settings' window with a '[Section name is empty]' label and a text input field. The 'Common' section is expanded, showing the following settings:

<input checked="" type="radio"/> Section <input type="radio"/> Tab	
Field Label	
Field GUI	
Original name (English)	
Custom name	<input type="text"/>
Original name (Spanish)	

Figure 19: Special element type selection

Clicking any spot outside the 'Settings' window closes the window and simultaneously saves all

changes performed to the 'Common' settings.

5.2.4 Visibility Settings

According to the company preferences, access level and visibility of each context layout item can be defined for a certain display profile. Such settings define what the user will be able to see on the screen and how they will be able to manage the context layout elements.

The 'Visibility' section of the 'Settings' popup window shows the visibilities set for the selected item. By default, the visibility is set to ReadWrite for fields and to ReadOnly for other elements.

Different visibilities can be added by clicking the green 'plus' in the right of the window. This opens the 'Visibility Settings' window where the access level of the default visibility can be changed or an additional visibility level can be selected.

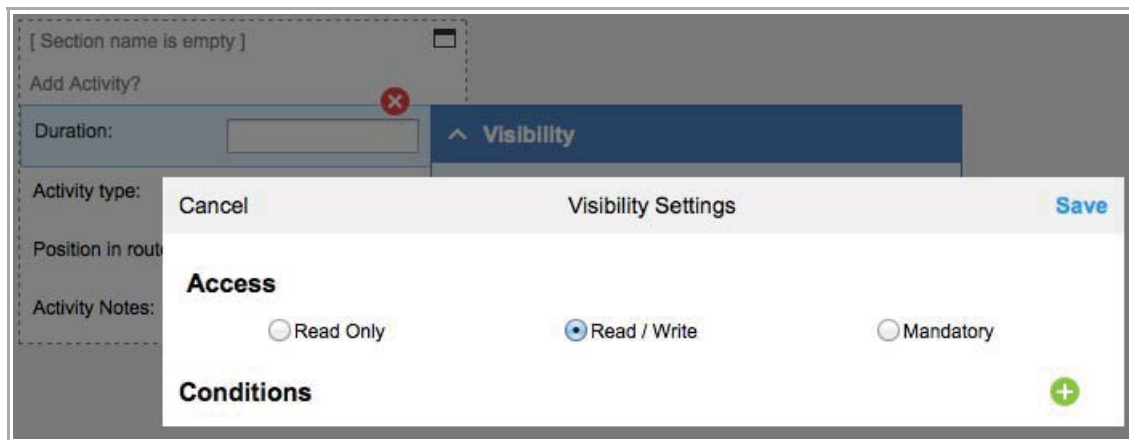


Figure 20: Visibility level selection

If no conditions are set for the access level, such visibility replaces any other visibility with no conditions, including the default ReadWrite visibility.

To define conditions in which the selected access level is to be applied, the user needs to click the green 'plus' in the 'Conditions' line. This opens the 'Conditions' section.



Figure 21: 'Conditions' section

Here the field to serve as the condition, the condition itself and the value(s) of the field can be selected.

Figure 22: Visibility condition set

More conditions can be added by clicking the green 'plus' again. The existing conditions can be removed by clicking the red 'cross'. The visibility settings can be discarded by clicking 'Cancel' in the top left or saved by clicking 'Save' in the top right. The settings appear in the 'Visibility Settings' section of the 'Settings' window.

Figure 23: Field visibilities

For enumeration properties, the value visibilities can be set, that is, the conditions in which certain property values are visible or hidden. When the user clicks an enumeration property, the 'Visibility' section contains one more subsection, 'Value Visibility Settings'.

Figure 24: Value visibility settings

Clicking the green 'plus' opens the 'Value Visibility Settings' window where the conditions of displaying certain values can be defined.

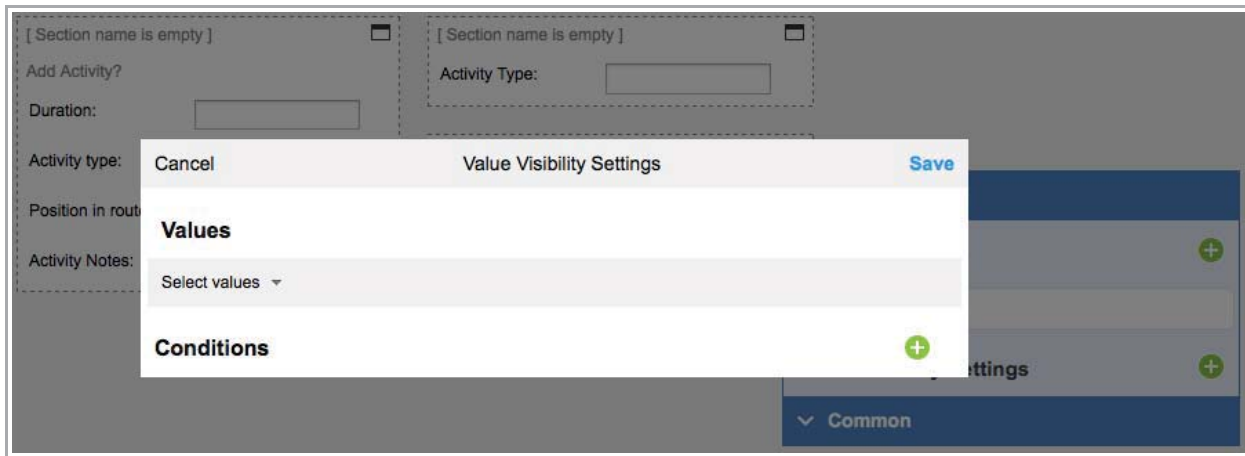


Figure 25: 'Value Visibility Settings' window

To set the value visibility, the user has to select the field value(s) from the list of available values and set the conditions in which the selected values will be visible.

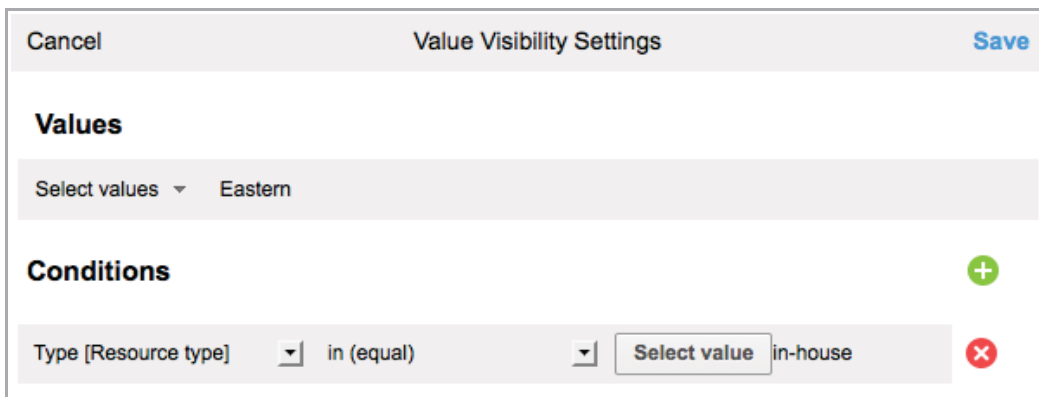


Figure 26: Value visibility selection

The value visibility settings can be discarded by clicking 'Cancel' in the top left or saved by clicking 'Save' in the top right. The settings appear in the 'Value Visibility Settings' section of the 'Settings' window.

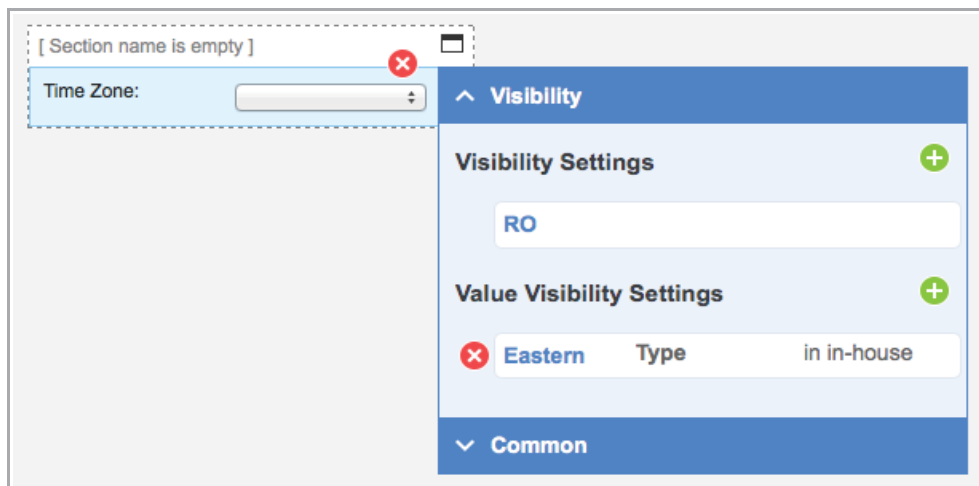


Figure 27: Value visibilities

Visibilities can be modified by clicking the visibility line. This leads to the 'Visibility Settings' screen. Also, the existing visibilities can be removed by clicking the red 'cross' at the beginning of the selected visibility line. The default visibility cannot be deleted, it can only be modified. This way, each element will always have at least one visibility setting.

Visibilities can be set for any element of a context layout: action, section, tab, text label, field, 'Submit' button. Clicking each element opens the 'Settings' popup window where the visibilities can be configured. This allows creating flexible contexts tailored for each particular display profile.

5.2.5 Deleting Elements

Any element can be removed from the context layout. To remove an element, the user needs to click it and then click the red 'cross' appearing next to the element.

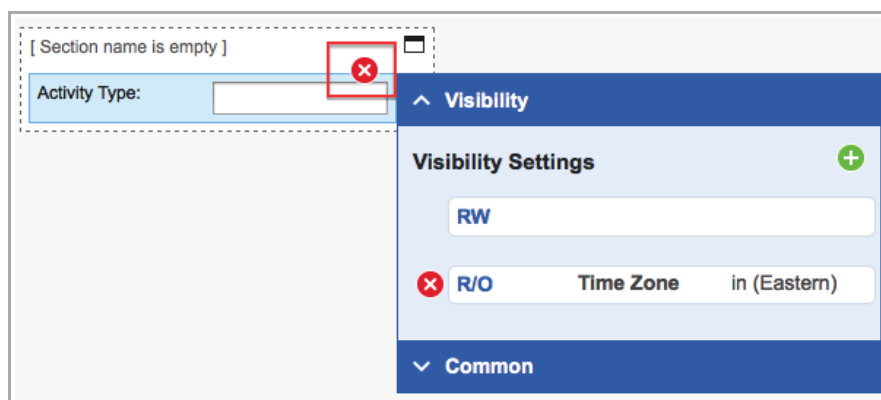


Figure 28: Deleting element

Individual fields or labels can be removed from a section or a tab. At the same time, whole sections or tabs can also be removed together with their content.

Note: the 'Actions' and 'Submit' lines, as well as the 'Submit' button can never be removed.

5.2.6 Context Saving

When all changes to the context layout have been performed, the configuration has to be saved by clicking 'Save' in the top right of the screen. Clicking 'Save' applies the changes made to the current context which can be immediately visible on the actual Mobility Application screen. If the user is not satisfied with the changes made to the context layout, they can discard them by clicking 'Close'.



Figure 29: 'Close' and 'Save' buttons

The same context layout can be edited both in the Visual Form Editor and in the traditional context layout editing screen. All changes made in both editors are applied to the same context and are visible in both editors, as well.

When the context layout is saved, the user is able to see what it will look like in the Mobility Application.

The screenshot displays the Visual Form Editor interface for editing a context layout titled "Start activity". The interface is divided into three main sections:

- Left Panel (Fields List):** A list of available fields for the form, including:
 - Activity status (astatus)
 - # Ports (no_ports)
 - Account Number (customer_number)
 - Activity ID (aid)
 - Activity Notes (ACTIVITY_NOTES)
 - Activity time of assignment (atime_of_assignment)
 - Activity time of booking (atime_of_booking)
 - Activity Type (ACTIVITY_TYPE)
 - Activity Type (atype)
 - Activity type (aworktype)
 - Address (caddress)
 - Agreement for Work (work_agreement_sign)
 - Alerts (activity_alerts)
 - Alternative route found and will be used
- Top Panel (Form Structure):** Contains buttons for "Undo", "Close", and "Save". Below these is a dashed box representing the form structure, with a section titled "[Section name is empty]" containing two input fields: "Work Order:" and "Name:". Below this is another dashed box titled "Job Hazard Review" containing several input fields and checkboxes:
 - Number of Job haza... (dropdown)
 - Hazard 1: (dropdown)
 - Hazard 2: (dropdown)
 - Hazard 3: (dropdown)
 - Animal is secured.: (checkbox)
 - Waiting for moderat... (checkbox)
 - Ladder is secured a... (checkbox)
 - Proper safety gear ... (checkbox)
 - Source of odor can ... (checkbox)
 - I'm able to work 12ft... (checkbox)
 - Alternative route fou... (checkbox)
- Bottom Panel (Actions and Special elements):** Contains a "Submit" button.

Figure 30: Context layout created in Visual Form Editor

The screenshot shows a mobile application interface for starting an activity. At the top, a green header bar contains a 'Details' button, the text 'Start activity' with a home icon, the time '08:32 AM', and search and chat icons. Below the header, a white box displays 'Work Order: 137150150' and 'Name: Mitzi Brummer'. The main section is titled 'Job Hazard Review' and contains several form elements: a dropdown for 'Number of Job hazards*' set to '3', three dropdowns for 'Hazard 1*', 'Hazard 2*', and 'Hazard 3*' with values 'Dogs and/or Animals present', 'Overhead electrical lines', and 'High Winds' respectively, and three checkboxes for 'Animal is secured.', 'Waiting for moderate wind. Team lead or supervisor - alerted.', and 'I'm able to work 12ft from electric line.'. At the bottom right of the form are 'Dismiss' and 'Submit' buttons.

Start activity	
08:32 AM	
Work Order:	137150150
Name:	Mitzi Brummer
Job Hazard Review	
Number of Job hazards*:	3
Hazard 1*:	Dogs and/or Animals present
Hazard 2*:	Overhead electrical lines
Hazard 3*:	High Winds
Animal is secured.:	<input type="checkbox"/>
Waiting for moderate wind. Team lead or supervisor - alerted.:	<input type="checkbox"/>
I'm able to work 12ft from electric line.:	<input type="checkbox"/>
<div>Dismiss Submit</div>	

Figure 31: Same context in Mobility Application